

INFORMATION DISCLOSURE STATEMENT

Applicants	:	Steven F. Bolling, M.D., et al.
App. No.	:	Unknown
Filed	:	Herewith
For	:	IMPLANTABLE HEART ASSIST SYSTEM AND METHOD OF APPLYING SAME
Examiner	:	Carl H. Layno (Presumed)
Group Art Unit	:	3762 (Presumed)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing 156 references. All references, except 2, 4, 5, 16 and 24, are of record in U.S. patent application No. 10/289,467, filed November 6, 2002, through which this application claims entitlement to an earlier filing date under 35 U.S.C. § 120. Those references not of record are U.S. patents and copies are not required to be submitted as per 1276 Official Gazette 55, dated August 5, 2003. Accordingly, copies of the references of record are not submitted pursuant to 37 C.F.R. § 1.98(d).

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If there are any additional fees, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

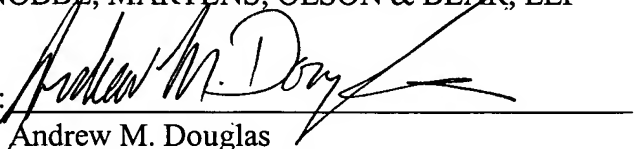
Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated:

December 5, 2003

By:


Andrew M. Douglas
Registration No. 51,212
Attorney of Record
Customer No. 20,995
(949) 760-0404

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. FORFLOW.1CP6C1	APPLICATION NO. Unknown Unknown
	APPLICANTS Steven F. Bolling, M.D., et al.	
	FILING DATE Herewith	GROUP 3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1	6,610,004	8/26/03	Viole et al.			
	2	6,558,356	7/1998	Barbut			
	3	6,390,969	5/21/02	Bolling et al.			
	4	6,245,045 B1	6/2001	Stratienko			
	5	6,228,052 B1	5/2001	Okada et al.			
	6	6,224,540	5/01/01	Lederman et al.			
	7	6,221,103	4/24/01	Melvin			
	8	6,190,408	2/20/01	Melvin			
	9	6,183,411	2/06/01	Mortier et al.			
	10	6,085,754	7/11/00	Alferness et al.			
	11	5,964,694	10/12/99	Siess et al.			
	12	5,941,813	8/24/99	Sievers et al.			
	13	5,911,685	6/15/99	Siess et al.			
	14	5,851,174	12/22/98	Jarvik et al.			
	15	5,824,070	10/20/98	Jarvik			
	16	5,785,686	7/1998	Runge, Thomas M.			
	17	5,749,855	05/12/98	Reitan			
	18	5,746,575	05/05/98	Westphal et al.			
	19	5,584,804	12/17/96	Klatz et al.			
	20	5,562,595	10/08/96	Neisz			
	21	5,533,958	6/9/96	Wilk			
	22	5,514,073	5/7/96	Miyata et al.			
	23	5,511,958	04/30/96	Chen et al.			
	24	5,505,710	4/1996	Dorsey, III			
	25	5,503,615	04/30/96	Goldstein			
	26	5,453,076	09/26/95	Kiyota et al.			
	27	5,437,601	8/1/95	Runge			

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	28	5,433,731	7/18/95	Hoegnelid et al.			
	29	5,429,584	07/04/95	Chiu			
	30	5,413,549	5/9/95	Leschinsky			
	31	5,376,113	12/27/97	Jansen et al.			
	32	5,374,239	12/20/94	Mischenko			
	33	5,352,180	10/04/94	Candelon et al.			
	34	5,346,458	09/13/94	Affeld			
	35	5,332,403	07/26/94	Kolff			
	36	5,300,113	04/05/94	Arpesella et al.			
	37	5,290,227	3/1/94	Pasque			
	38	5,273,518	12/28/93	Lee et al.			
	39	5,267,940	12/07/93	Moulder			
	40	5,263,978	11/23/93	Kaufman et al.			
	41	5,211,659	05/18/93	Strimling et al.			
	42	5,176,619	01/05/93	Segalowitz			
	43	5,171,207	12/15/92	Whalen			
	44	5,169,379	12/08/92	Freed et al.			
	45	5,169,378	12/08/92	Figuera			
	46	5,147,388	09/15/92	Yamazaki			
	47	5,147,281	09/15/92	Thornton et al.			
	48	5,133,744	07/28/92	Ramos Martinez			
	49	5,131,905	07/21/92	Grooters			
	50	5,129,878	07/14/92	Takano et al.			
	51	5,116,564	05/26/92	Jansen et al.			
	52	5,098,370	03/24/92	Rahat et al.			
	53	5,092,844	03/03/92	Schwartz et al.			
	54	5,089,017	02/18/92	Young et al.			

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	55	5,069,662	12/03/91	Bodden			
	56	5,059,167	10/19/91	Lundquist et al.			
	57	5,020,516	06/04/91	Biondi et al.			
	58	4,995,857	02/26/91	Arnold			
	59	4,995,856	02/26/91	Heindl et al.			
	60	4,994,078	02/19/91	Jarvik			
	61	4,968,293	11/06/90	Nelson			
	62	4,957,504	09/18/90	Chardack			
	63	4,927,407	05/22/90	Dorman			
	64	4,908,012	03/13/90	Moise et al.			
	65	4,906,229	03/06/90	Wampler			
	66	4,902,273	02/20/90	Choy et al.			
	67	4,902,272	02/20/90	Milder et al.			
	68	4,895,150	01/23/90	Isaacson et al.			
	69	4,883,462	11/28/89	Williamson et al.			
	70	4,872,874	10/10/89	Taherin			
	71	4,861,330	08/29/89	Voss			
	72	4,838,889	06/13/89	Kolff			
	73	4,822,357	04/18/89	Forster et al.			
	74	4,771,765	09/20/88	Choy et al.			
	75	4,759,760	07/26/88	Snapp Jr.			
	76	4,756,302	07/12/88	Portner et al.			
	77	4,719,921	01/19/88	Chirife			
	78	4,697,574	10/6/87	Karcher et al.			
	79	4,690,134	09/01/87	Snyders			
	80	4,688,998	08/25/87	Olsen et al.			
	81	4,685,446	08/11/87	Choy			

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	82	4,666,443	05/19/87	Portner			
	83	4,625,712	12/02/86	Wampler			
	84	4,611,578	05/27/86	Helmes			
	85	4,573,997	03/04/86	Wisman et al.			
	86	4,569,332	2/11/86	Schiff et al.			
	87	4,552,522	11/12/85	Polaschegg et al.			
	88	4,546,759	10/15/85	Solar			
	89	4,522,195	06/11/85	Schiff			
	90	4,459,977	07/17/84	Pizon et al.			
	91	4,457,673	07/03/84	Conley et al.			
	92	4,407,271	10/04/83	Schiff			
	93	4,384,829	05/24/83	Conely et al.			
	94	4,302,854	12/01/81	Runge			
	95	4,240,409	12/23/80	Robinson et al.			
	96	4,167,046	09/11/79	Portner et al.			
	97	4,154,227	05/15/79	Krause et al.			
	98	4,143,616	03/13/79	Bible			
	99	4,135,496	01/23/79	Chazov et al.			
	100	4,080,958	3/19/78	Bregman et al.			
	101	4,077,394	03/07/78	McCurdy			
	102	4,051,840	10/4/77	Kantrowitz et al.			
	103	4,047,849	09/13/77	Clay			
	104	4,034,742	07/12/77	Thoma			
	105	4,004,299	01/25/77	Runge			
	106	3,964,479	06/22/76	Boag et al.			
	107	3,939,820	02/24/76	Grayzel			
	108	3,885,251	05/27/75	Pedrosa			

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	109	3,835,864	9/17/79	Rasor et al.			
	110	3,692,018	09/19/72	Goetz et al.			
	111	3,592,184	07/13/71	Watkins et al.			
	112	3,017,885	1/19/62	Robicsek			
	113	2,935,068	05/30/60	Donaldson			
	114	2,876,769	03/10/59	Cordova			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	115	2 174 151A	01/10/85	UK				
	116	SU 1,303,165 A2	1/19/85	Russia				
	117	0,232,074	01/22/87	Europe				
	118	0 411 605 A1	01/08/90	EPO				
	119	0 405 749 A1	05/25/90	EPO				
	120	WO 94/05347	03/17/94	WO				
	121	WO 97/15228	05/01/97	WO				
	122	WO 98/14225	03/10/97	PCT				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	123	JAMA, January 8, 1968. Vol. 203. No 2, Initial Clinical Experience with Intra-aortic Balloon Pumping in Cardiogenic Shock. PP 113-118
	124	Article: Magnetically Suspended Vad. PP M361, 363. 364.
	125	Article: Mechanical Auxiliary Ventricle. PP M345-344
	126	Article: A Mechanical Auxiliar Ventricle. PP M340-344.
	127	Patent Server: Patent Search Reports: 15 PP total.
	128	Patent Server: Search Results: 30 PP total
	129	Article: Effect of Stationary Guiding Vanes on Improvement of the Washout Behind the Rotor in Centrifugal Blood Pumps: PP M220-224

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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	130	Article: An Implantable Seal-less Centrifugal Pump: Comparison of Ultrasonic Transit Time and Ultrasonic Doppler Systems: PP 808-815
	131	Patent Server: Search Reports: 32 PP total
	132	Article: George J. Magovern, Jr. MD. Use of Biomedics Pump in Postoperative Circulatory Support: 6PP total
	133	Article: Bruce J. Shook. MS Eng. The Abiomed BVS 5000 Biventricular Support System. 6 PP total
	134	Article: Valluvan Jeavanandam. MD. Et al. TCI Heartmate Left Ventricular Assist System: Results with Bridge to Transplant and Chronic Support: 5PP total
	135	Article: O.H. Frazier, MD. Long-Term Ventricular Support with the Heartmate in Patients Undergoing Bridge-to-Transplant Operation: 3PP total
	136	Article: Narayanan Ramasamy. PhD. Et al.. Novacor LVAS: Results with Bridge to Transplant and Chronic Support: 3PP total.
	137	Article: Robert W. Emery. MD et al. Uses of Mechanical Circulatory Assist Devices at the Minneapolis Heart Institute: 5PP total
	138	Article: Lawrence R. McBride. MD et al. Anticoagulation in Patients with Ventricular Assist Devices: 1Pg
	139	Article: Roque Pifarre, MD et al. Bridge to Transplantation with the Total Artificial Heart: The Loyal Experience. 5PP total
	140	Article: Pratap S. Khanwilkar. MS. MBA et al. Future Prospects for a Totally Implantable Artificial Heart: 8 PP total
	141	Article: Concepts in the Application of Pneumatic Ventricular Assist Devices for Ischemic Myocardial Injury. PP 162-168
	142	Article: Long-Term Left Ventricular Assist Device Use Before Transplantation: PP M530-M534
	143	Article: In Vitro Characterization of a Magnetically Suspended Continuous Flow Ventricular Assist Device: PP M359-M360
	144	Article: Estimation of Left Ventricular Function in Patients With a Left Ventricular Assist device: M544-551
	145	Article: Long Term Follow Up of Survivors of Postcardiotomy Circulatory Support. Ruzevich et al.; 4535, A.S.A.I.O. Transactions 34 (1988) April-June, No. 2, Hagerstown, MD, USA. PP 16-124
	146	Article: Hemodynamic Effects of the Concomitant Use of Intra-Aortic Balloon Pumping and Venoarterial Bypass without Oxygenation in Cardiogenic Shock. Takamoto et al. Intra-Aortic Pumping & Ventoarterial Bypass. Vol. 19. No. 3. May-June 1972. PP 244-248.
	147	Article: Mechanical Cardiopulmonary Support During Arteriography and Surgical Correction of Coronary Insufficiency Producing Myocardial Infarction with Cardiogenic Shock; Carlson et al. Journal of the Association for the Advancement of Medical Instrumentation. Vol. 6, No. 3. May-June 1972; PP 244-248.
	148	Article: The Sternotomy Hemopump, A Second Generation Intraarterial Assist Device. PP M218-220, 223.
	149	Article: Transarterial Closed-Chest Left Ventricular (TaCLV) Bypass. PP 386-390.
	150	Article: First Clinical Application of transarterial Closed-Chest Left Ventricular (TaCLV) Bypass. PP 386-391.
	151	Article: Implantable Left Ventricular Assist Device. PP 1522-1533.
	152	Article: Effects of Partial and Complete Unloading of The Failing Left Ventricle by Transarterial Left Heart Bypass. PP 865-872.
	153	Article: Hydrodynamic Properties of a New Percutaneous Intra-aortic Axial Flow Pump. Reitan et al. ASAIO Journal 2000. pp. 323-328.
	154	Journal of the Association for the Advancement of Medical Instrumentation, Vol. 10, No. 5, Sept.-Oct 1976, p. 215; Medical Instrumentation Editorial
	155	Dormandy, Goetz, and Kripke; Surgery, Feb. 1969, Vol. 65, No. 2, pp. 311-320; Hemodynamics and coronary blood flow with counterpulsation

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	156	The New England Journal of Medicine, Article: Treatment of Severe Fluid Overload by Ultrafiltration, Vol. 291, No. 15, Oct. 10, 1974, pp. 747-751

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